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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/043,377 | 01/11/2002 | Michael Wall | N8837 | 4667 |
| 34309 | 7590 | 08/03/2004 | EXAMINER | |
| LARGESCALE BIOLOGY CORPORATION BANK OF AMERICA PLAZA, SUITE 2020 414 UNION STREET NASHVILLE, TN 37219 | | | SMITH, CAROLYN L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1631 | |

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/043,377 | WALL, MICHAEL | |
| | Examiner | Art Unit | |
| | Carolyn L Smith | 1631 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 May 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 15-27 is/are pending in the application.
 - 4a) Of the above claim(s) 17-24 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 15,16 and 25-27 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) 15-27 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Applicant's amendments and remarks, filed 5/24/04, are acknowledged. Amended claims 15, 25, and 26 and new claim 27 are acknowledged.

Applicant's arguments, filed 5/24/04, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from the previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claims 15-16 and 25-27 are herein under examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-16 and 25-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is necessitated by amendment.

Claim 15 (line 4) recites a comma after the term "computer" which renders step b) to be vague and indefinite. It is unclear if the categorizing within the computer is separate from the rest of the step due to the presence of the comma. If the categorizing is an act to be applied to the plurality of sequence reads, it is unclear if the categorizing has to be within the computer. Clarification of this issue is requested via clearer claim wording. Claims 16 and 25-27 are also rejected due to their direct or indirect dependency from claim 15.

Claim Rejections – 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejection of claims 15, 16, 25, and 26 is necessitated by amendment under 35 U.S.C. 102(b) as being anticipated by Gong et al. (P/N 5,935,783).

Gong et al. disclose assembling cDNAs that were selected by 7 cosmids (an identifiable characteristic other than size) into 13 groups (col. 8, lines 25-28). Gong et al. disclose the groups of cDNAs were subdivided according to size (col. 8, lines 28-30). Gong et al. disclose that some clones from each subgroup were chosen for cDNA walking and DNA sequencing (col. 8, lines 30-32). Gong et al. disclose that all of the 432 cDNA clones were organized and assembled (col. 8, lines 25-28) which is reasonably interpreted to mean that all unassembled sequence reads and newly created assemblies were categorized and matched, as stated in instant claim 15. Gong et al. disclose assembling sequences within each contig in example 1 (col. 8, line 55) which represents the repetition of steps b) and c), as stated in amended claim 15. For example, Gong et al. disclose assembling DGS-A by 11 cDNA clones from cDNA contig 1 (col. 9, lines 1-24).

The following paragraphs disclose DGS-B was assembled by 7 cDNAs from contig 2 (col. 9, lines 25-35) as well as assemblies for the remaining 14 other contigs (col. 12, line 22). Gong et al. disclose that six ESTs were detected in the EST database (dbEST) with greater than 97%

homology to the transcript (col. 9, lines 9-21). Due to the amended comma in claim 15 which renders step b) unclear as to whether categorization within the computer applies to the plurality of sequence reads, Gong et al. disclose use of computers via searching nucleic acid and amino acid sequence homology using BLAST email server at NCBI to attempt to find and obtain matches (col. 9, lines 14-21 and lines 29-31) which represents providing a plurality of sequence reads to a computer as well as providing an assembled sequence to a user (i.e. user being another processor).

Thus, Gong et al. anticipate the limitations in claims 15, 16, 25, and 26. This rejection is necessitated by amendment.

Applicant states the passage on col. 8, lines 25-28 cannot mean that all unassembled sequence reads and newly created assemblies were categorized and matched. This is found unpersuasive as the Applicant fails to provide sound reasoning as to why this broad and reasonable interpretation would be considered improper. Applicant states that Gong et al. does not anticipate all of the limitations in amended claim 15. This is found unpersuasive as the Applicant fails to provide sound reasoning as to why the disclosure and interpretation of the prior art would be considered improper.

Conclusion

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The CM1 Fax Center number is (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (571) 272-0721. The examiner can normally be reached Monday through Thursday from 8 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (571) 272-0722.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner Tina Plunkett whose telephone number is (571) 272-0549.

Ardin H. Marschel 8/2/04
ARDIN H. MARSHEL
PRIMARY EXAMINER

July 26, 2004